ENGINEERING SPECIFICATIONS	Date: 2005/JAN
PRODUCT: SMART Sensor/TMC Pick-off Sensor	Name:
P/NO.: SCP-NT	Dept.: Engineering

Pick-off sensor SCP-NT detects heading reference of a magnetic compass and converts it into NMEA serial data for input to other navigational equipment.
Either one of the serial sentence; HDM or HDT, can be selected by inner short pin arrangements. A built-in variable resister allows adjustment of output by ±10° degrees, thus, making the HDT output to align to a True North datum when its local variation is known.

Calibration of output can be made at twelve (12) cardinal points, by connecting PC having RS232C communication port. Windows utility "Hyper-Terminal" is required.

With mounting plate supplied as standard, SCP-NT Pick-off sensor is fitted simply onto Saura magnetic compasses. Special mounting plates are also available, to suit some of the pupoular magnetic compass bowls from other manufacturers

Basic Specifications

Power supply: 12V - 15VDC
Current drain: 120mA typical
Output data: NMEA-HDM or HDT selectable by inner short pin arrangements
Output cycle: 200mS average (fixed)
Accuracy: ±1° average at 12 cardinal points, max ±1°
Resolution: 0.3 deg min.
Follow-up speed: 45 deg/sec max.
Ambient temp.: -10 to +50 °C

Output data format (Heading signal)

1) HDM

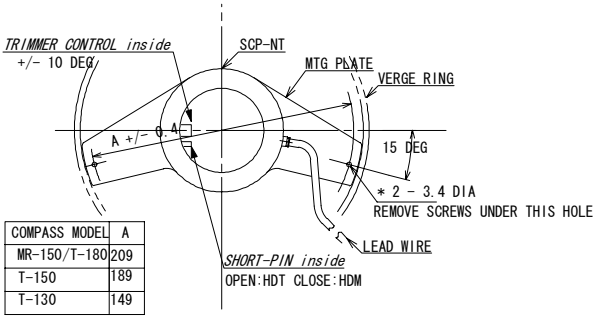
$	H	C	H	D	M	.	10^{3}	10^{2}	10^{1}	.	10^{-1}	.	M	*	SUM1	SUM2	CR	LF

2) HDT

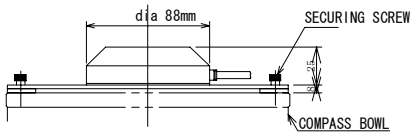
$	H	C	H	D	T	.	10^{3}	10^{2}	10^{1}	.	10^{-1}	.	T	*	SUM1	SUM2	CR	LF

Calibration:
Calibration can be made by connecting a PC having RS-232C port. This operation requires MS Windows utility - HYPER TERMINAL. Ask for a manual for commands and instructions.

SCP-NT



COMPASS MODEL	A
MR-150/T-180	209
T-150	189
T-130	149



REMOVE SCREWS BEHIND THE HOLES OF MOUNTING PLATES AND FIX THE SENSOR WITH THE SCREWS PROVIDED.